In the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-8 (canceled)

9. (New) A method for characterizing, according to specific parameters, a sound signal x(t) evolving over the time t during a duration D into different bands of frequencies k and then recorded x(k, t), comprising:

storing the signal x(t),

calculating and storing the energy E(k, t) of said signal x(k, t) for each of said bands of frequencies k, k varying from 1 to K and according a temporal window h(t) of a duration of 2N,

calculating and storing the energy F(k, j, t) and the related phase φ(j, k, t) of E(k, t) for the bands of frequencies j, j varying from 1 to J,

using a temporal window h'(t) of a duration of 2N', the JxK values of the energy F(j, k, t) and of the related phase φ(j, k, t) thus obtained constituting the specific parameters of an extract of a duration of 2N' of the sound signal x(t), and

reiterating said calculation at regular intervals in order to obtain the universe of the specific parameters for the duration D of the sound signal x(t).

10. (New) The method according to claim 9, further comprising:

calculating for each frequency band j the mean value of the energy E(k, t) over 2N' seconds,

reiterating said calculation at regular intervals in order to obtain the universe of specific parameters for the duration D of the sound signal x(t), and

including the mean values obtained among the specific parameters of the sound signal x(t).

11. (New) The method according to claim 9, further comprising:

taking into account the specific parameters of a sound signal x(t) as the components of a vector representative of x(t),

positioning the vectors in a space of as many dimensions as there are parameters,

defining the classes grouping the most proximate vectors, and

recording said classes.

12. (New) The method according to claim 9, wherein the classes have inter-class distances and intra-class distances, and further comprising:

selecting from among the specific parameters, those parameters making it possible to obtain relatively large inter-class distances vis-à-vis the intra-class distances, and

recording the selected parameters.

13. (New) A device for identifying a sound signal, comprising:

a database server comprising means for implementing the method for characterizing a sound signal according to specific parameters according to claim 9, and

means for searching for said sound signal in the database.

14. (New) A device for identifying a sound signal, comprising:

a database server comprising means for implementing the method for characterizing a sound signal according to specific parameters according to claim 11, and

means for searching for said sound signal in the database,

wherein the means for searching comprise means for recognizing the class to which said sound signal belongs and the means for comparing, by the method of the nearest neighbor algorithm, specific parameters of the unknown sound signal with the specific parameters of the database.

15. (New) A device for identifying a sound signal, comprising:

a database server comprising means for implementing the method for characterizing a sound signal according to specific parameters according to claim 12, and

means for searching for said sound signal in the database,

wherein the means for searching comprise means for recognizing the class to which said sound signal belongs and the means for comparing, by the method of the nearest neighbor algorithm, specific parameters of the unknown sound signal with the specific parameters of the database.